



Bubble Tank

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TOOLS:

- [Drill \(1\)](#)
- [Drill bit \(1\)](#)
- [Drill bit \(1\)](#)
the diameter of the air tubing
- [Duct tape \(1\)](#)
- [Hot glue gun \(1\)](#)
- [Large drill bit \(1\)](#)
(any big size actually)
- [Soldering iron \(1\)](#)



PARTS:

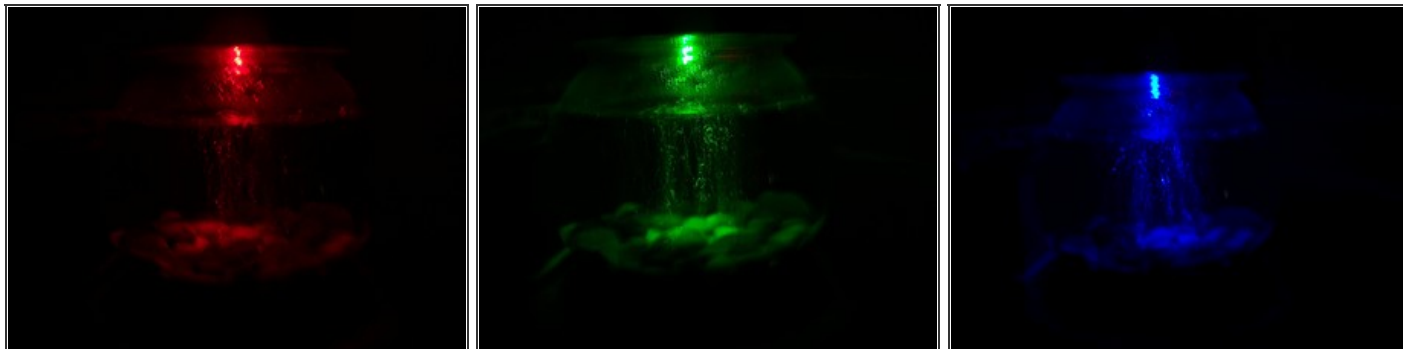
- [Fish tank or bowl \(1\)](#)
at least 1 gallon
- [Air pump \(1\)](#)
- [Tubing \(1\)](#)
to fit the pump.
- [Bubble stone or wall that fits the tubing \(1\)](#)
- [Bags of pebbles \(1\)](#)
I got mine from the dollar store.
- [Acrylic sheet \(1\)](#)
- [4" PVC drain \(1\)](#)
- [Battery holder \(1\)](#)
(or AAA)
- [Radio Shack 5mm 7-Color LED \(1\)](#)
- [Wire \(1\)](#)

SUMMARY

This project will show you how to build a tank that holds water and blows a bubble tornado in

it. A color-changing LED illuminates the bubbles providing a relaxing effect. This one cost around \$40. For \$12 more, you can provide a different color motif for each month.

Step 1 — Bubble Tank



- The LED illuminating the tank changes colors. Pictures 1,2,and 3 show the light's effect.
- First, drill a hole the same size as your pipe, about 1 inch above the bottom.
- Cut approx 6" off of the 5' of tubing. Wrap a piece of duct tape around the tube an inch from the end. Then push the tube into the hole until there's enough room for the bubble stone.
- Hot glue the pipe to the bowl.

Step 2



- Connect the bubble stone on the inside of the bowl, then cover the stone with pebbles. You can use a different color of pebbles for each month, but this costs an extra \$12 (assuming that you buy your pebbles at the dollar store as I did!).
- For example, because the tank takes 1.5 bags of pebbles, for Halloween you could use 1 bag of orange pebbles and a half bag of black pebbles.
- Connect the check valve so that the white arrow is pointing towards the tank. If you connect it the wrong way and run the pump, **it will burn out the pump**. Then connect the rest of the tubing to the other end of the check valve. Connect the pump to the other end of the hose.
- **NEVER EVER CONNECT THE PUMP WITHOUT THE CHECK VALVE!! WATER WILL RUN DOWN THE PIPE AND SHORT THE PUMP.**



Step 3

- Connect the Rainbow LED to the power supply and the momentary switch to the last pin on the LED. Then connect the switch's other terminal to ground.
- Cut a piece of acrylic to fit the top of the tank. Drill a 5mm hole in the center of the piece to mount the LED in. Use the biggest drill bit that you have to drill 4-8 vent holes around it. **DON'T USE THE FLAT TYPE OF BIT OR YOU WILL CRACK THE ACRYLIC.**
- Mount the LED in the hole pointing down at the water and use the 4" pipe "drain" to cover the electronics.
- Drill a hole in the side of the cover for the power cables.
- Sorry about the pictures. I took them all after it was assembled. I also left out some photos and schematics because the resolution was too small.

If you have any questions, just ask. I get on M:P pretty much every day. =)

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